



---

## AlphaServer 2100A Hardware Release Notes

EK-2100A-CL. C02

June 1996

---

Read the following information before configuring your AlphaServer 2100A system.

### PCI Option Restrictions

The AlphaServer 2100A system has an on-board PCI-to-PCI bridge (DECchip 21050).

Physical slots 4, 5, 6, and 7 are the bottom 4 slots. These slots are in front of the bridge (primary PCI).

Physical slots 0, 1, 2, and 3 are the top 4 slots. These slots are behind the bridge (secondary PCI).

Refer to the system Owner's Guide for an illustration of the PCI slot locations.

Restrictions apply to the following PCI options.

- KZPSA-BB Fast Wide Differential SCSI controller. This option must be installed in front of the bridge if you plan to run Windows NT or any ARC firmware utilities, such as storage configuration utilities. If the option is installed behind the bridge, the following error message is displayed when the SRM console is started:

```
***unable to assign PCI base address  
***bus 2, slot 9, function 0, size 000010000 (16 bit I/O)
```

The slot number in the message will vary, depending on which slot has the KZPSA installed. This message can be ignored if you are running OpenVMS or Digital UNIX.

Once the ARC utilities are run, the KZPSA-BB can be moved behind the bridge, if desired, on systems running OpenVMS. The option can also be moved behind the bridge, if desired, on systems running Digital UNIX if the firmware revision level of the module is A10. Use the `show device` command at the `P00>` console prompt to determine the module firmware revision level.

- KZPSM and KZPDA PCI adapter boards. SRM Version 4.4 or later is required if these devices are to be installed behind the bridge.

- PB2GA-Jx S3-Trio64 PCI graphics card. The PB2GA must be installed in front of the bridge if you plan to run Windows NT or any ARC firmware utilities, such as storage configuration utilities. Once the ARC utilities are run, the PB2GA-Jx can be moved behind the bridge, if desired, on systems running Digital UNIX or OpenVMS. If you are not planning to run any ARC firmware utilities, you can install the PB2GA-JX option either in front of or behind the bridge if you are running OpenVMS or Digital UNIX. SRM console version 4.5 or later is recommended for this option.
- The KZPSC-xx PCI RAID controller documentation states that the KZPSC-xx cannot be installed behind the bridge, but this restriction does not apply on AlphaServer 2100A systems.

Consult the *AlphaServer 2100A Supported Options List* for changes to the PCI option restrictions. The list is available on the Internet at:

- <ftp://ftp.digital.com/pub/Digital/Alpha/systems/as2100a/docs/> or
- <http://www.digital.com/info/alphaserver/products.html>

## Options Not Supported on AlphaServer 2100A

The following options are not supported on the AlphaServer 2100A. Consult the *AlphaServer 2100A Supported Options List* for any changes.

DE422-SA	DEC EtherWORKS EISA TP/BNC
DE425-AA	EISA, 32-bit, B. M., PC NIC
DJ-ML200	PCI NVRAM module.
PB2HA-SA	EISA to Fast SCSI Host Adapter
PB2SX-AA	EISA Prestoserve NVRAM Option
PBXGA-nn	ZLXp-En 8-Plane or 24-plane Adapter

## Maximum EISA-Based DSSI Controllers

A maximum of 2 KFESA or KFESB EISA-based DSSI controllers can be installed on an AlphaServer 2100A system.

## CPU Failover

CPU failover, documented in the *AlphaServer 2100A Owner's Guide*, is currently implemented under Digital UNIX and OpenVMS. It will be implemented at V4.0 of Windows NT.

## Windows NT 3-CPU + 1 GB Memory

The Windows NT operating system will not auto start with the specific configuration of 3 CPUs plus 1 GB of memory. The problem does not occur with 1, 2, or 4 CPUs or less than 1 GB of memory.

## Pci\_arb Environment Variable Setting

The default setting for the `pci_arb` environment variable is “Partial-Rotating.” Do not alter this setting, as this could result in degraded system performance.

## Pci\_read\_mult Environment Variable

The `pci_read_mult` environment variable, documented in the *AlphaServer 2000/2100/2100A Firmware Reference Guide*, is no longer implemented in the SRM console as of Version 4.4. The console sets this function appropriately.

## Available ECU Slots for ECU Configurations

The AlphaServer 2100A system uses the same EISA Configuration Utility (ECU) configuration file as the AlphaServer 2100, and therefore shows 8 EISA slots available. The AlphaServer 2100A has 3 EISA slots: Slot 1, Slot 2, and Slot 3. EISA slots 4–7 in the ECU should be ignored. For more information about using the ECU, see the system Owner’s Guide.

## Using test Command After Shutting Down an Operating System

The `test` command is an SRM console command used to test an entire system, a subsystem, or a specific device. To use the `test` command after shutting down an operating system, you must initialize the system to a quiescent state. Enter the following commands at the SRM console:

```
P00>>> set auto_action halt
P00>>> init
P00>>> test
```

After testing is completed, set the `auto_action` environment variable to its previous value (usually, `boot`) and use the Reset button to reset the system. For more information on the `test` command, see your system documentation.

## ECU-Related Power-Up Messages

- The following message may be displayed on the SRM console terminal during system power-up. This message does not affect system performance and should be ignored.

```
ECU error, slot 0, found DEC2A01, expected nothing
EISA Configuration Error. Run the EISA Configuration Utility.
```

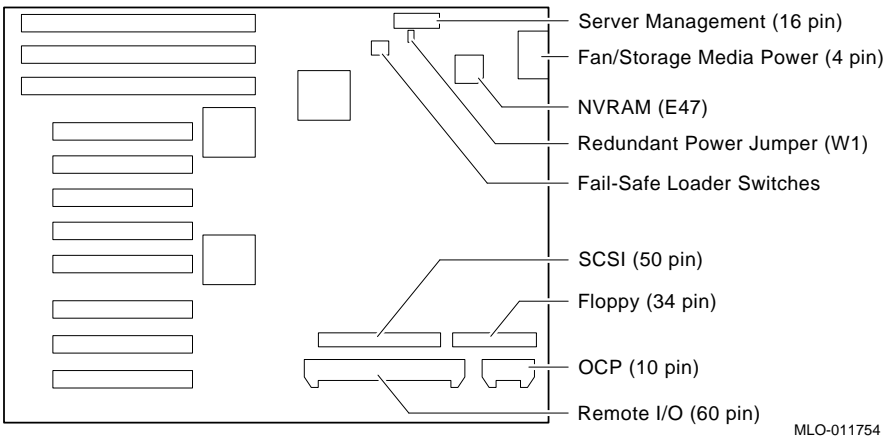
- A related message may be displayed on the ARC console monitor during system power-up. This message does not affect system performance and should be ignored.

```
Initializing EISA bus 0.
Slot (0) Missing Configuration Error
```

## AlphaServer 2100A RM Redundant Power Supply

The following information supplements information in the *AlphaServer 2100A RM Installation/Owner's Guide* (EK-2100A-RM).

The following illustration replaces Figure 2-2 in the Installation/Owner's Guide. The jumper labeled W1 activates redundant mode power. It does not activate the optional remote server management module.



A second power supply can be added to AlphaServer 2100A rackmount systems to provide a redundant power supply. With a redundant power supply, if one power supply fails, the second supply provides power and the system continues to operate normally.

To activate redundant mode power, install the redundant power jumper (W1) on the PCI/EISA backplane, as shown in the following illustration.

